AROUND SET THEORY

In the contemporary panorama of analytical disciplines, Set Theory is with no doubt the best illustration of the deep differences between North-American and European musicological traditions. Despite an abundance of publications on Set Theory, French musicology and, more generally, European musicology, have retained a certain scepticism regarding this approach, whose basic principles, however, are often poorly understood. Yet, if we trace back the history of mathematical tools used in 20th century musical analysis and theory, European research has given many examples of theoretical constructions very close to the ones developed in the United States. One of the objectives of this Conference was to approach American Set Theory from a larger perspective, incorporating the works on formalizing musical structures proposed by several composers and theorists of the last century (from Costère to Xenakis) as well as recent applications of some mathematical tools within analysis and computer-assisted composition.

The Conference “Around Set Theory,” which brought together at IRCAM a number of authorities on this subject, was really a remarkable occasion bringing to mind the history of Set Theory as well as an opportunity to open a debate on the current situation of an analytical method whose compositional applications and mathematical ramifications are far from exhausted. Music theorists, musicologists, analysts, composers and mathematicians, sometimes coming from quite different cultural and geographic backgrounds, entered into a dialog during this meeting, which also enabled putting into question the range, the stakes, and the limits of the idea of a computational musicology, of which American Set Theory represents one of the most striking examples of the 20th century.